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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

App. No. : 10/531,357 Confirmation No.: 2071
Applicant : Green et al.
Filed : April 14, 2005
Int. App. No. : PCT/NZ2003/000229
Int. Filing Date : October 15, 2003
Art Unit : 1742
Examiner : Not yet assigned
For : PLANT ALPHA FARNESENE SYNTHASE AND
POLYNUCLEOTIDES ENCODING SAME
Docket No. : 38-05
Customer No. : 23713

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Examiner is respectfully requested to consider the references, copies enclosed, which may qualify as prior art. For the Examiner's convenience, the references are listed on the attached Patent and Trademark Office form PTO-1449.

This information is cited in a spirit of forthrightness and cooperation to enable the applicants to obtain that measure of protection for the invention to which there is entitlement. However, no representation is made that the listed art actually qualifies as prior art under the patent statute and the mere use of PTO-1449 is not an admission that all listed references are prior art. No representation is made that applicants know of the best art.

It is believed that this submission does not require the payment of a fee. If this is not correct, please charge any required fee to deposit account no. 07-1969.

Respectfully submitted,

Heeja Yoo-Warren
Reg. No. 45,495

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Attorney Docket No. 38-05
bmk: September 19, 2005

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as EXPRESS MAIL in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Application Number	10/531,357
Filing Date	04/14/2005
First Named Inventor	Green et al.
Art Unit	1742
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U.S. PATENT DOCUMENTS

Examiner Initial*	Cite No. ¹	Document Number (US-)	Publication Date (MM-DD-YYYY)	Name	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear (or entire document unless noted otherwise)
	1	6,008,043	12/28/1999	Croteau et al	
	2	5,487,983	01/30/1996	Kim et al.	
	3	5,264,558	11/23/1993	Kim et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No. ¹	Foreign Patent Document Number (include WIPO country code)	Publication Date (MM-DD-YYYY)	Name	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear (or entire document unless noted otherwise)	T ²
	4	WO 00/17327	03/30/2000	Chappell et al.		
	5	WO 99/15624	04/01/1999	Croteau et al.		
	6	JP 2000245482	09/12/2000			

NON-PATENT LITERATURE DOCUMENTS

Examiner Initial*	Cite No. ¹	REFERENCE Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	7	Altschul et al. (1997) "Gapped BLAST and PSI-BLAST: A New Generation of Protein Database Search Programs," <i>Nuc. Acids Res.</i> 25(17):3389-3402	
	8	Bengtsson et al. (2001) "Plant Odor Analysis of Apple: Antennal Response of Codling Moth Females to Apple Volatiles during Phenological Development," <i>J. Agric. Food Chem.</i> 49:3736-3741	
	9	Benfey et al. (1989) "Regulated Genes in Transgenic Plants," <i>Science</i> 244:174-181	
	10	Bohlmann et al. (1998) "Plant Terpenoid Synthases: Molecular Biology and Phylogenetic Analysis," <i>Proc. Natl. Acad. Sci. USA</i> 95:4126-4133	
	11	Cai et al. (2002) "A cDNA Clone for β -Caryophyllene Synthase from <i>Artemisia annual</i> ," <i>Phytochem.</i> 61:523-529	
	12	Cane et al. (1999) "Trichodiene Synthase: Mechanism-Based Inhibition of a Sesquiterpene Cyclase," <i>Bioorg. Med. Chem. Lett.</i> 9:1127-1132	
	13	Chen et al. (1996) "Cloning and heterologous expression of a second (+)-delta-cadinene synthase for <i>Gossypium arboreum</i> "; <i>J. Nat. Prod.</i> 59(10):944-951 (Abstract only)	

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional).

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Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

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	14	Croteau et al. (2000) <u>Biochemistry and Molecular Biology of Plants</u> , Buchanan et al. Eds., American Society for Plant Physiologists, pp.1250-1318		
	15	Davies (1990) "Gas Chromatographic Retention Indices of Monoterpenes and Sesquiterpenes on Methyl Silicone and Carbowax 20M Phases," <i>J. Chrom.</i> 503:1-24		
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	20	Fan et al. (1999) "Development of Apple Superficial Scald, Soft Scald, Core Flush, and Greasiness Is Reduced by MCP," <i>J. Agric. Food Chem.</i> 47:3063-3068		
	21	Fischbach (2001) "Putative Chloroplast Terpene Synthase," <i>Genbank</i> CAC41012		
	22	Ju et al. (2000) "Cuticular Phenolics and Scald Development in "Delicious" Apples," <i>J. Am. Soc. Hortic. Sci.</i> 125(4):498-504		
	23	Ju et al. (2000) "Lovastatin Inhibits α-Farnesene Biosynthesis and Scald Development in "Delicious" and "Granny Smith" Apples and "d'Anjou" Pears," <i>J. Am. Soc. Hortic. Sci.</i> 125(5):626-629		
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	25	Ju et al. (2001) "Lovastatin Inhibition of α-Farnesene Production in Ripening Apple: Precursor Feeding Studies," <i>J. Am. Soc. Hortic. Sci.</i> 126(4):491-495		
	26	Ju et al. (2000) "Evidence that α-Farnesene Biosynthesis During Fruit Ripening is Mediated by Ethylene Regulated Gene Expression in Apples," <i>Postharvest Biol. Technol.</i> 19:9-16		
	27	Kawasaki et al. (1996) "Specific Regulation of Gene Expression by Antisense Nucleic Acids: A Summary of Methodologies and Associated Problems," <i>Artific. Organs</i> 20(8):836-848		
	28	Lange et al. (2000) "Isoprenoid Biosynthesis: The Evolution of Two Ancient and Distinct Pathways Across Genomes," <i>Proc. Natl. Acad. Sci. USA</i> 97(24):13172-13177		
	29	Langenkamper et al. (1998) "Sucrose-Phosphate Synthase Steady-State mRNA Increases in Ripening Kiwifruit," <i>Plant Mol. Biol.</i> 36:857-869		
	30	Lesburg et al. (1998) "Managing and Manipulating Carbocations in Biology: Terpenoid Cyclase Structure and Mechanism," <i>Curr. Opin. Struct. Biol.</i> 8:695-703		
	31	Llave et al. (2002) "Cleavage of <i>Scarecrow</i> -like mRNA Targets Directed by a Class of <i>Arabidopsis</i> miRNA," <i>Science</i> 297:2053-2056		
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		Lucker et al (2002) "Citrus limon" <i>Genbank</i> AF514288	
	32	Luehrsen (1991) "Intron Enhancement of Gene Expression and the Splicing Efficiency of Introns in Maize Cells," <i>Mol. Gen. Genet.</i> 225:81-93	
	33	Matich et al. (1996) "Solid Phase Microextraction for Quantitative Headspace Sampling of Apple Volatiles," <i>Anal. Chem.</i> 68:4114-4118	
	34	McIntyre (1996) "Strategies for the Suppression of Peroxidase Gene Expression in Tobacco. I. Designing Efficient Ribozymes," <i>Trans. Res.</i> 5:257-262	
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	36	Needleman et al. (1970) "A General Method Applicable to the Search for Similarities in the Amino Acid Sequence of Two Proteins," <i>J. Mol. Biol.</i> 48:443-453	
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	39	Pearson (1990) "Rapid and Sensitive Sequence Comparison with FASTP and FASTA," <i>Methods in Enzymol.</i> 183:63-98	
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	42	Rowan et al. (2001) "Conjugated Triene Oxidation Products of α -Farnesene Induce Symptoms of Superficial Scald on Stored Apples," <i>J. Agric. Food. Chem.</i> 49:2780-2787	
	43	Rupasinghe et al. (1998) "Biosynthesis of α -Farnesene and Its Relation to Superficial Scald Development in "Delicious" Apples," <i>J. Am. Soc. Hortic. Sci.</i> 123(5):882-886	
	44	Rupasinghe et al. (2000) "Sesquiterpene α -Farnesene Synthase: Partial Purification, Characterization, and Activity in Relation to Superficial Scald Development in Apples," <i>J. Am. Soc. Hortic. Sci.</i> 125(1):111-119	
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	46	Steele et al. (1998) "Sesquiterpene Synthases from Grand Fir (<i>Abies grandis</i>)," <i>J. Biol. Chem.</i> 273(4):2078-2089	
	47	Trapp et al. (2001) "Genomic Organization of Plant Terpene Synthases and Molecular Evolutionary Implications," <i>Genetics</i> 158:811-832	
	48	Van Geldre et al. (2000) "Cloning and Molecular Analysis of Two New Sesquiterpene Cyclases from <i>Artemisia annua</i> L.," <i>Plant. Sci.</i> 158:163-171	

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	49	Voinnet et al. (2003) "An Enhanced Transient Expression System in Plants Based on Suppression of Gene Silencing by the p19 Protein of Tomato Bushy Stunt Virus," <i>Plant J.</i> 33:949-956	
	50	Watkins et al. (1993) "Relationships Between Alpha-Farnase, Ethylene Production and Superficial Scald Development of Apples," <i>Acta. Hort.</i> 343:155-160	
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	52	Yang et al. (2002) "Geraniol Synthase," <i>Genbank</i> CAD29734	
	53	Zubay et al. (1973) "In Vitro Synthesis of Protein in Microbial Systems," <i>Annu. Rev. Genet.</i> 7:267-287	

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